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10/825,752

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David Hung

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DAVID HUNG, NATHAN WOOD and ROBERT SAKAL

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Appeal 2009-005417  
Application 10/825,752  
Technology Center 3700

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Decided: September 22, 2009

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Before ERIC GRIMES, RICHARD M. LEOVITZ, and STEPHEN  
WALSH, *Administrative Patent Judges*.

WALSH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) involving claims to a method of collecting cells from a breast duct. The Patent Examiner rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

## STATEMENT OF THE CASE

The invention concerns “methods . . . that increase[] retrievable fluid and cellular material from a breast duct.” (Spec. 2:13-14.) Claims 1, 2, 4 and 5, which are all the pending claims, are on appeal. Claim 1 is representative and reads as follows:

1. A method for increasing a retrievable cell amount in a breast duct comprising the steps of:  
  
applying vibration internally to a breast duct sufficient to induce cell sloughing within said breast duct and;  
collecting said sloughed cells from said breast duct;  
  
wherein applying vibration to said breast duct increases the retrievable amount of cells collected from said breast duct.

The Examiner rejected the claims under 35 U.S.C. § 103(a) as unpatentable over Hung,<sup>1</sup> Love,<sup>2</sup> Powell<sup>3</sup> and Kim.<sup>4</sup>

## OBVIOUSNESS

### *The Issue*

The Examiner’s position is that the references taught and suggested collecting cells by massage or vibration “applied externally and internally to the breast. In other words any massaging or vibration applied externally to the breast is inherently applied internally to the breast.” (Ans. 4.) The Examiner argues that “the massaging disclosed by Hung is applied inside of

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<sup>1</sup> U.S. Patent No. 6,413,228 B1, issued to David Hung et al., Jul. 2, 2002.

<sup>2</sup> U.S. Patent No. 6,221,622 B1, issued to Susan M. Love, Apr. 24, 2001.

<sup>3</sup> U.S. Patent No. 4,740,196, issued to Margaret D. Powell, Apr. 26, 1988.

<sup>4</sup> U.S. Patent No. 6,054,314, issued to Nam Woo Kim, Apr. 25, 2000.

the breast and the vibration taught by Kim is applied internally to any body part.” (*Id.* at 5.)

Appellants contend that “claim 1 recites a method for applying vibration internally to a breast duct.” (App. Br. 8.) According to Appellants, “the application of vibration to breast duct in order to specifically increase cell sloughing would be a non-obvious improvement over previous methods of increasing the cellular content collected from breast ducts.” (*Id.*)

The issue with respect to this rejection is whether the prior art taught or suggested the internal application of vibration to a breast duct.

#### *Findings of Fact*

1. A disclosed “aspect of the invention is a method for increasing a retrievable cell amount in a breast duct comprising inducing cell sloughing within the duct by applying vibration to the duct.” (Spec. 5:26-28.)
2. The Specification states: “[v]ibration may be applied externally to the breast or internally through a device inserted directly into the breast duct . . . .” (*Id.* at 12:12-14.)
3. Hung described a method of collecting breast cells using an indwelling tool to access a breast duct. (Col. 12, ll. 7-9.)
4. Hung taught that during the procedure, “the breast may be massaged and squeezed.” (Col. 11, ll. 65-66.)
5. Love taught a method of collecting cellular material from a single breast duct by accessing a single duct and using washing fluid. (Abstract.)

6. Powell taught a method of stimulating lactation that comprised using a vibrator attached to a suction bulb applied to the breast. (Col. 4, ll. 13-20.)
7. Kim taught a method of collecting cells from internal organs that comprised applying external vibration to the body. (Col. 3, ll. 28-32.)
8. Kim taught that “[t]he external energy source can be any device capable of producing energy that is effective to loosen and detach at least some cells from an internal organ of a subject.” (Col. 3, ll. 47-49.)

### *Principles of Law*

When determining whether a claim is obvious, an Examiner must make “a searching comparison of the claimed invention – including all its limitations – with the teachings of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995).

“[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

### *Analysis*

We interpret the claim phrase “applying vibration internally to a breast duct” to require the internal application of vibration. That is the plain meaning of the claim, and it is consistent with the Specification’s distinction between applying vibration externally and applying it internally. (FF2.) The Examiner’s position is that externally applied vibration is inherently transmitted to interior tissues. Whether that is a likely result of externally

applied vibration or not, it is irrelevant. When interpreted in light of the Specification, the claim requires the vibration to be applied internally, not applied externally and transmitted internally.

We conclude that a prima facie case of obviousness was not made, because the case presented did not account for the proper interpretation of “applying vibration internally.”

### CONCLUSIONS OF LAW

The prior art did not teach or suggest the claimed step “applying vibration internally to a breast duct.”

### SUMMARY

We reverse the rejection of claims under 35 U.S.C. § 103(a) as unpatentable over Hung, Love, Powell and Kim.

### REVERSED

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